WHAT IS CLAIMED IS:

1. A method for selecting a dark area in a digital image having a number of columns, each column having a number of pixels and each pixel having a gray level, the method comprising the steps of:

identifying one or more areas having a substantially uniform gray level within the digital image;

determining an effective darkness value for each identified area; and

selecting the dark area corresponding to the identified area having the highest effective darkness value.

2. The method as recited in claim 1, wherein the step of identifying one or more areas having a substantially uniform gray level within the digital image comprises the steps of:

determining an average gray level for each column;

determining a partial derivative of the average gray level for the columns; and

identifying one or more areas using the partial derivative.

3. The method as recited in claim 2, wherein the partial derivative of the average gray level for the columns comprises averaging the average gray level of pixels within a column with the average gray level of pixels within a succeeding column.

4. The method as recited in claim 2, further comprising the step of sampling the columns of the digital image.

5. The method as recited in claim 2, further comprises the step of filtering the partial derivative.

6. The method as recited in claim 5, wherein the step of filtering the partial derivative uses a threshold function.

7. The method as recited in claim 1, wherein the step of determining an effective darkness value for each identified area comprises weighting a complement of a gray level of the identified area with a size value of the identified area.

8. The method as recited in claim 7, wherein the gray level of each identified area comprises an average gray level of the pixels within the identified area.

9. The method as recited in claim 7, wherein the gray level of each identified area comprises a median gray level of the pixels within the identified area.

10. The method as recited in claim 7, wherein the size value of each identified area comprises the number of pixels within the identified area.

11. The method as recited in claim 7, wherein the size value of each identified area comprises the number of columns within the identified area.

12. A method for selecting a dark area within a film comprising the steps of:

creating a digital image by scanning the film;

cropping the digital image, the cropped digital image having a number of columns, each column having a number of pixels, each pixel having a gray level;

sampling the columns;

determining an average gray level for each sampled column;

determining a partial derivative of the average gray level for the sampled columns;

filtering the partial derivative;

identifying one or more areas using the filtered partial derivative;

determining an effective darkness value for each identified area; and

selecting a dark area corresponding to the identified area having the highest effective darkness value.

13. The method as recited in claim 12, wherein the partial derivative of the average gray level for the sampled columns comprises averaging the average gray level of pixels within a sampled column with the average gray level of pixels within a succeeding sampled column.

14. The method as recited in claim 12, wherein the step of filtering the partial derivative uses a threshold function.

15. The method as recited in claim 12, wherein the step of determining an effective darkness value for each identified area comprises weighting a complement of a gray level of the identified area with a size value of the identified area.

16. The method as recited in claim 15, wherein the gray level of each identified area comprises an average gray level of the pixels within the identified area.

17. The method as recited in claim 15, wherein the gray level of each identified area comprises a median gray level of the pixels within the identified area.

18. The method as recited in claim 15, wherein the size value of each identified area comprises the number of pixels within the identified area.

19. The method as recited in claim 15, wherein the size value of each identified area comprises the number of columns within the identified area.

20. The method as recited in claim 12, further comprising the step of reporting the location the dark area to an image processor.

21. The method as recited in claim 12, further comprising the steps of:

determining an average gray level for the dark area; and

reporting the average gray level for the dark area to an image processor.

22. A computer program embodied on a computer readable medium for selecting a dark area in a digital image having a number of columns, each column having a number of pixels and each pixel having a gray level, the computer program comprising:

a code segment for identifying one or more areas having a substantially uniform gray level within the digital image;

a code segment for determining an effective darkness value for each identified area; and

a code segment for selecting the dark area corresponding to the identified area having the highest effective darkness value.

23. The computer program as recited in claim 22, wherein the code segment for identifying one or more areas having a substantially uniform gray level within the digital image comprises:

a code segment for determining an average gray level for each column;

a code segment for determining a partial derivative of the average gray level for the columns; and

a code segment for identifying one or more areas using the partial derivative.

24. The computer program as recited in claim 23, wherein the partial derivative of the average gray level for the columns comprises averaging the average gray level of pixels within a column with the average gray level of pixels within a succeeding column.

25. The computer program as recited in claim 23, further comprising a code segment for sampling the columns of the digital image.

26. The computer program as recited in claim 23, further comprising a code segment for filtering the partial derivative.

27. The computer program as recited in claim 26, wherein the code segment for filtering the partial derivative uses a threshold function.

28. The computer program as recited in claim 22, wherein the code segment for determining an effective darkness value for each identified area comprises weighting a complement of a gray level of the identified area with a size value of the identified area.

29. The computer program as recited in claim 28, wherein the gray level of each identified area comprises an average gray level of the pixels within the identified area.

30. The computer program as recited in claim 28, wherein the gray level of each identified area comprises a median gray level of the pixels within the identified area.

31. The computer program as recited in claim 28, wherein the size value of each identified area comprises the number of pixels within the identified area.

32. The computer program as recited in claim 28, wherein the size value of each identified area comprises the number of columns within the identified area.

33. A computer program embodied on a computer readable medium for selecting a dark area within a film comprising:

a code segment for creating a digital image by scanning the film;

a code segment for cropping the digital image, the cropped digital image having a number of columns, each column having a number of pixels, each pixel having a gray level;

a code segment for sampling the columns;

a code segment for determining an average gray level for each sampled column;

a code segment for determining a partial derivative of the average gray level for the sampled columns;

a code segment for filtering the partial derivative;

a code segment for identifying one or more areas using the filtered partial derivative;

a code segment for determining an effective darkness value for each identified area; and

a code segment for selecting a dark area corresponding to the identified area having the highest effective darkness value.

34. The computer program as recited in claim 33, wherein the partial derivative of the average gray level for the sampled columns comprises averaging the average gray level of pixels within a sampled column with the average gray level of pixels within a succeeding sampled column.

35. The computer program as recited in claim 33, wherein the code segment for filtering the partial derivative uses a threshold function.

36. The method as recited in claim 33, wherein the step of determining an effective darkness value for each identified area comprises weighting a complement of a gray level of the identified area with a size value of the identified area.

37. The computer program as recited in claim 36, wherein the gray level of each identified area comprises an average gray level of the pixels within the identified area.

38. The computer program as recited in claim 36, wherein the gray level of each identified area comprises a median gray level of the pixels within the identified area.

39. The computer program as recited in claim 36, wherein the size value of each identified area comprises the number of pixels within the identified area.

40. The computer program as recited in claim 36, wherein the size value of each identified area comprises the number of columns within the identified area.

41. The computer program as recited in claim 33, further comprising a code segment for reporting the location the dark area to an image processor.

42. The computer program as recited in claim 33, further comprising:

a code segment for determining an average gray level for the dark area; and

a code segment for reporting the average gray level for the dark area to an image processor.

43. An imaging system comprising:

at least one light source operable to illuminate a film;

at least one optical sensor operable to detect light from the film; and

an image processor coupled to the optical sensors, wherein the image processor creates a digital image from the light detected by the optical sensors, identifies one or more areas having a substantially uniform gray level within the digital image, determines an effective darkness value for each identified area, selects a dark area corresponding to the identified area having the highest effective darkness value, and normalizes the digital image using the dark area.

44. The system as recited in claim 43, wherein:

the digital image has a number of columns, each column has a number of pixels, each pixel has a gray level; and

the image processor identifies one or more areas having a substantially uniform gray level within the digital image by determining an average gray level for each column, determining a partial derivative of the average gray level for the columns, and identifying one or more areas using the partial derivative.

45. The system as recited in claim 44, wherein the processor determines the partial derivative of the average gray level for the columns by averaging the average gray level of pixels within a column with the average gray level of pixels within a succeeding column.

46. The system as recited in claim 44, wherein the processor further samples the columns of the digital image.

47. The system as recited in claim 44, wherein the processor further filters the partial derivative.

48. The system as recited in claim 43, wherein the processor determines an effective darkness value for each identified area by weighting a complement of a gray level of the identified area with a size value of the identified area.

49. The system as recited in claim 48, wherein the gray level of each identified area comprises an average gray level of the pixels within the identified area.

50. The system as recited in claim 48, wherein the gray level of each identified area comprises a median gray level of the pixels within the identified area.

51. The system as recited in claim 48, wherein the size value of each identified area comprises the number of pixels within the identified area.

52. The system as recited in claim 48, wherein the size value of each identified area comprises the number of columns within the identified area.

53. The system as recited in claim 43, wherein the processor further crops the digital image.